

# Climate Policy in (and beyond) California: Some Economic and Political Perspectives

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# Cap-and-Trade Policy Design Criteria

1. Environmental integrity
2. Cost-effectiveness
3. Fairness
4. Simplicity

# The MAC's Design Recommendations

- What sectors to cover?

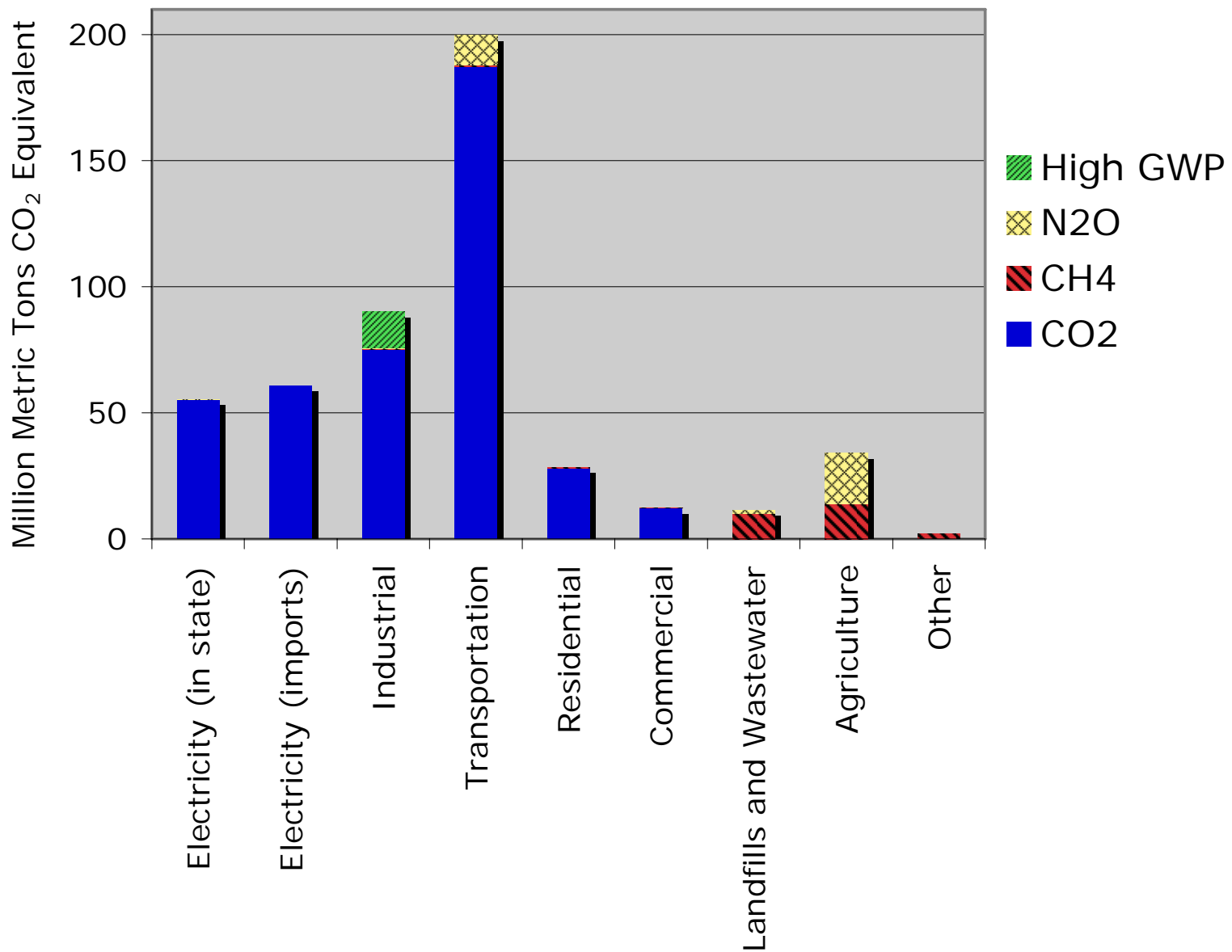
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## California Greenhouse Gas Emissions, 2004



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  - Include emissions associated with imported electricity

# Key Economic and Political Issues

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## 1. Direct Regulation vs. Cap-and-Trade

## A Cap-and-Trade System Complements Direct Regulation

Suppose the cap requires a reduction of 50 million metric tons in the electricity and industrial sectors.

If new direct regulations (e.g., tighter efficiency standards) in these sectors yield reductions of 20 million tons – this contributes to the 50 million target.

The limited supply of allowances assures a total of 50 million tons in reductions. Allowance prices will rise enough to bring about the needed additional 30 million tons of reduction.

-- Direct regulation contributes to meeting the cap!



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3. Promoting a Fair Distribution of the Regulatory Burden

## Free Allocation vs. Auctioning of Allowances

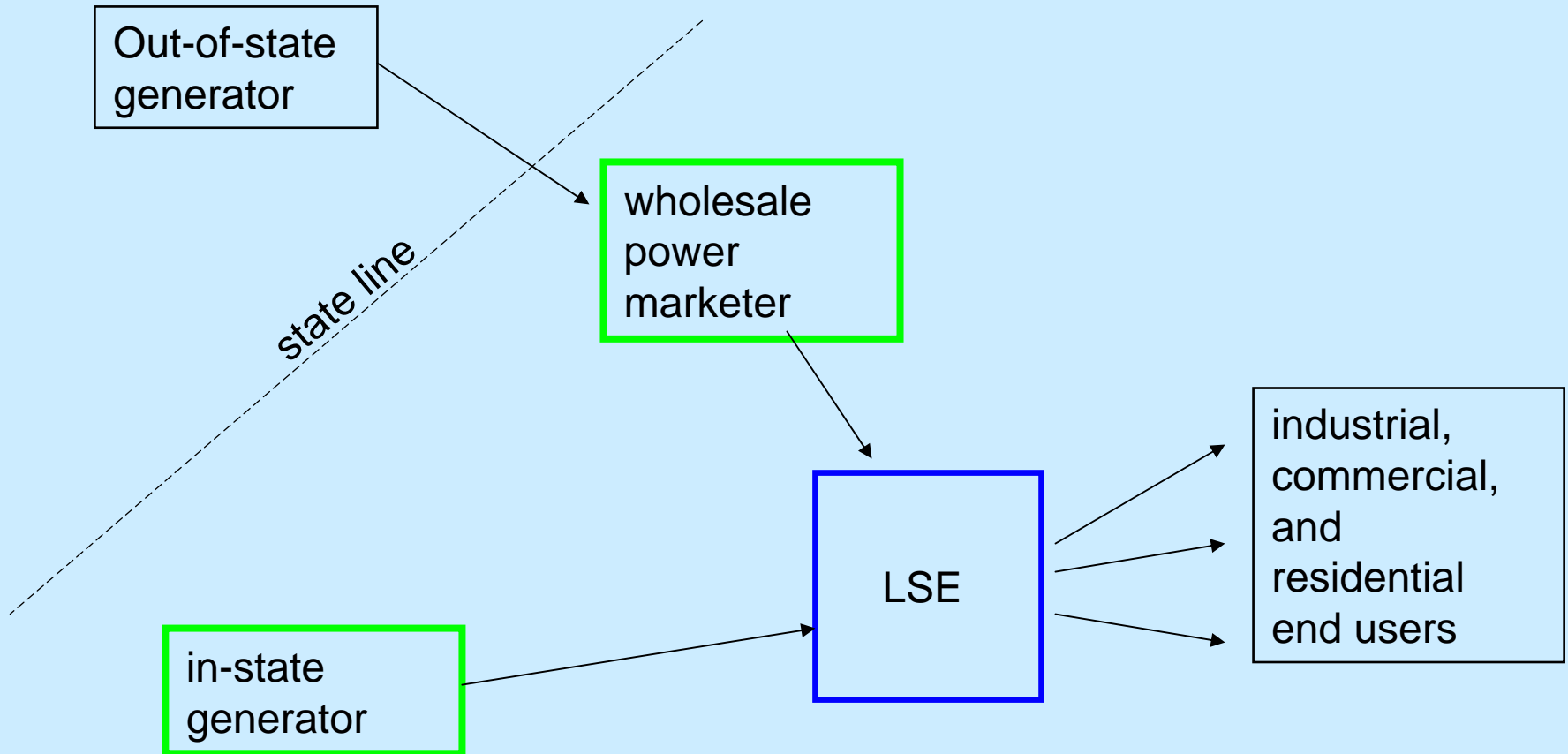
Must a cap&trade system hurt profits of major energy suppliers and users?

-- No!

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4. Leakage

# Load-Based and First-Seller Approaches to Leakage



# Does the Load-Based Approach Lead to Greater Energy Conservation?

Suppose:

allowance price is \$10/ton

each kwh of electricity involves X tons of emissions

Cost to the LSE of each additional kwh of electricity purchased:

- load-based approach:  $\$10 \times X$  (cost of X more allowances)
- first-seller approach:  $\$10 \times X$  (higher cost of electricity)

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5. Linkage (and offsets)

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5. Linkage (and offsets)
6. Move to a National System



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- hope that a Western regional system takes effect not long after the CA system is introduced
- hope that a Federal system arrives and replaces the CA system